

What is claimed is :

1. An SOI structure comprising:
  - a substrate including a silicon substrate, a BOX layer and an SOI layer;
  - 5 a well formed in a lower part of a device isolation area of the SOI layer so that a lower surface of the well is in contact with the BOX layer;
  - a field oxide film formed on a surface side within the well;
  - a gate line formed so as to be connected across an active area provided on the SOI layer and a portion of the field oxide film, the active area formed along two sides of the gate
  - 10 line and having a lower surface in contact with the BOX layer;
  - an insulation layer formed on the active area, gate line, and field oxide film;
  - an opening part formed within the insulation layer, the opening part opened in a full trench structure capable of partially exposing an active area of an adjacent transistor, and the opening part opened in a partial trench structure on the field oxide film to expose an upper
  - 15 part of the gate line; and
  - an LIC filled with conductive material in the opening part within the insulation layer.
2. The SOI structure of claim 1, wherein the LIC comprises Tungsten.
- 20 3. The SOI structure of claim 1, wherein the LIC comprises Copper.
4. A semiconductor structure comprising:
  - a substrate;
  - an insulating layer on the substrate;
  - 25 a semiconductor layer disposed on the insulating layer;
  - a well formed in a lower part of the semiconductor layer,
  - a field oxide layer formed on a surface of the well;
  - a first active area formed in the semiconductor layer, the active layer adjacent to the well;
  - 30 a gate line formed across a second active layer formed in the semiconductor layer, and across a portion of the field oxide layer;
  - an insulation layer formed on a portion of the first active area, and on the field oxide layer, the insulation layer covering a lower portion of the gate line; and

a metal fill extending in an opening in the insulation layer, the metal fill contacting both an upper portion of the gate line and the first active area.

- 5      5.      The semiconductor structure of claim 4 wherein the metal fill comprises Tungsten.
6.      The semiconductor structure of claim 4 wherein the metal fill comprises Copper.